

***Remarks***

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 13-29 are pending in the application, with claims 13, 24, 28 and 29 being the independent claims. Claims 1-12 are sought to be cancelled without prejudice to or disclaimer of the subject matter therein. New claims 13-29 are sought to be added. Applicant reserves the right to prosecute similar or broader claims, with respect to the cancelled claims, in the future. These changes are believed to introduce no new matter, and their entry is respectfully requested.

For the Examiner's reference, an exemplary relationship between previously examined and now cancelled claims 1-12 and new claims 13-29 is provided. Claims 13 and 28 recite similar features as examined claim 1. Claims 14 and 25 recite similar features as examined claims 3, 5, and 6. Claims 15, 17, and 26 recite similar features as examined claims 5-8. Claim 16 recites similar features as examined claim 4. Claim 18 recites similar features as examined claim 9. Claims 19, 20, 21 and 27 recite similar features as examined claim 10. Claim 22 recites similar features as examined claim 2; and claim 23 recites similar features as examined claim 12. Claims 24 and 29 recite similar features as examined claims 1, 2, 10, and 12.

Based on the above amendment and the following remarks, Applicant respectfully requests that the Examiner reconsider all outstanding rejections and that they be withdrawn.

***Examiner Interview of July 16, 2009***

Applicant wishes to thank the Examiner and the Examiner's SPE, Rachel Porter, for the personal interview with Applicant's representative, Anbar Khal, on July 16, 2009. The claim rejections and potential amendments were discussed. In particular, the distinguishing features set forth in the foregoing new claims 13 and 24 were discussed in view of the applied references. These new claims and the following remarks incorporate the suggestions discussed with the Examiner during the interview to overcome the rejections. Entry of these amendments and allowance of the present application is respectfully requested.

***Rejection under 35 U.S.C. § 103***

Claims 1-12 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent No. 5,823,948 to Ross, Jr. *et al.* ("Ross") in view of U.S. Published Patent Application No. 2002/0082868 A1 to Pories *et al.* ("Pories"). Claims 1-12 have been canceled, rendering their rejection, and the Response to Arguments section on page 14 of the Office Action, moot.

New claims 13-29 recite features similar to those of previously examined claims 1-12. As discussed and tentatively agreed to during the above-mentioned Interview, new claims 13-29 are patentable over Ross and Pories.

**Independent claims 13 and 28**

Independent claims 13 and 28 recite features that distinguish over the applied reference. For example, claim 13 recites

displaying, using a processing device, standard patient-language cardinal symptoms on an interface of a display device as one of a selection item and a check item of a chief complaint field of a medical record; and

using an input device to select or check one of the standard patient-language cardinal symptoms to enter the selected patient-language cardinal symptom in the chief complaint field so as to generate a new medical record that identifies the selected patient-language cardinal symptom as a chief complaint,

wherein the standard patient-language cardinal symptoms are selected extracted patient-language terms used in existing medical records of patients regarding cardinal symptoms of the patients, and

wherein the standard patient-language cardinals symptoms are accessed from a database which stores the standard patient-language cardinal symptoms so as to be free from association with any particular medical record.

Claim 28 recites similar distinguishing features as claim 13, using respective language.

As discussed during the above-mentioned Interview, Ross and Pories, either alone or in an allegedly obvious combination, do not disclose displaying standard patient-language cardinal symptoms on an interface of a display device as one of a selection item and a check item of a chief complaint field of a medical record, as recited in claims 13 and 28. In contrast, although Ross discloses a "Complaints Module" in which complaints are entered (see col. 8, line 55 - col. col. 9, line 19), Ross does not disclose the entered complaints as being the recited "*chief complaints*," e.g., a first case history *that a patient states* and is a primary reason why the patient desires a medical

service.<sup>1</sup> Further, Ross does not disclose that the complaints are entered by the recited "selecting or checking patient-language terms."

With respect to similar distinguishing features recited in previously pending claims 1-12, the Examiner states "Ross does not disclose ...extracting terms used in existing medical records...wherein the selected plurality of terms include...cardinal symptom of patients [and]...storing the standard terms in a database." *See* Office Action, page 4. Accordingly, Ross also does not disclose the claimed standard patient-language cardinal symptoms, which are selected extracted patient-language terms used in existing medical records of patients regarding cardinal symptoms of the patients.

Rather, on page 4 of the Office Action, for similar distinguishing features in previously pending claims 1-12, the Examiner states that Pories teaches the features Ross lacks. However, Pories merely teaches a clinical lexicon is built by extracting terms from "medical texts and articles" and also from third party data sources, which include "databases maintained by hospitals." Pories does not specifically disclose extracting terms from "existing medical records of patients," as recited in claims 13 and 28. Moreover, Pories does not disclose that the extracted terms are terms "regarding cardinal symptoms of patients," as recited in claims 13 and 28

In Pories, the extracted terms are not the recited "*chief complaints*" as received from the patient. In Pories, the doctor receives the chief complaint from the patient, and *based on the chief complaint*, the doctor selects a "present illness" from a menu of

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<sup>1</sup> *See, e.g.*, the present application at page 3, lines 30-34 ("[A] chief complaint (hereinafter referred to as cardinal symptom) is a first case history *that a patient states* and is a

available illnesses. The "present illness" is selected from a standard set of terms based upon the initial judgment of the doctor. For example, as shown in Fig. 11 and described at paragraph [0099] of Pories, a patient's chief complaint "I'm too fat" is displayed in window 63b, and the clinician selects "obesity" as the present illness from the selection menu 63a. Thus, the terms extracted for the clinical lexicon are terms relating to "present illnesses," which are medical terms relating to the doctor's determination of the medical disorder, and do not include patient-language chief complaints. *See*, for example, paragraphs [0013], [0037], and [0047] of Pories.

Moreover, Pories fails to disclose, as recited in the claims, a patient's chief complaint being entered *into a chief complaint field* of a medical record by selecting or checking patient-language cardinal symptoms. In Pories, the chief complaint field is completed by inputting the patient's chief complaint *in text form*. For example, in Pories the patient's chief complaint may be obtained from the patient during registration and subsequently displayed to the doctor during the patient's encounter with the doctor, where after the doctor selects the present illness from the display menu based on the doctor's interpretation of the patient's chief complaint. Thus, in Pories extracted terms are displayed as selectable items concerning the *present illness field* of a medical record, but Pories does not teach or suggest extracted terms being displayed as selectable items for the *chief complaint field* of the medical record, as recited in claims 13 and 28. Accordingly, there is no suggestion in Pories that the lexicon includes standard *patient-language* cardinal symptoms, or that the patient's chief complaint is entered in a medical

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primary reason why the patient desires a medical service. The chief complaint is represented similarly to terms *used by the patient*.)

record by selecting or checking patient-language cardinal symptoms, as recited in claims 13 and 28.

Neither Ross nor Pories disclose the claimed standard patient-language cardinal symptoms or the claimed feature that these standard patient-language cardinal symptoms can be *selected or checked* for entry in the *chief complaint field* of a new medical record. Any suggestion by the Examiner that these distinguishing features are suggested or taught can only be made through improper speculation and conjecture. Applicants respectfully assert that the Examiner's statements regarding Ross and Pories improperly and impermissibly go beyond the disclosure of the reference and, rather than any evidence of record, find their basis only in speculation, which is against current BPAI and Federal Circuit law. Specifically, both the BPAI and Federal Circuit require the Examiner to show obviousness without relying on mere speculation or conjecture. (See *In re Lee*, 277 F.3d 1338, 1342-44 (Fed. Cir. 2002) (discussing the importance of relying on objective evidence and making specific factual findings with respect to the obviousness) (emphasis added).) Further, M.P.E.P. Section 2144.03(a) states that "[i]t is never appropriate to rely solely on 'common knowledge' in the art without evidentiary support in the record, as the principal evidence upon which a rejection was based." (Emphasis added.) (See *In re Zurko*, 258 F.3d 1379, 1385 (Fed. Cir. 2001) ("[T]he Board cannot simply reach [obviousness] conclusions based on its own understanding or experience--or on its assessment of what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these [obviousness] findings.")) Further, a rejection based on section 103 must rest upon a factual basis rather than conjecture, or speculation. "Where the legal conclusion [of

obviousness] is not supported by the facts it cannot stand.” *In re Warner*, 379 F.2d 1011, 1017 (CCPA 1967). See also *In re Kahn*, 441 F.3d at 988 (Fed. Cir. 2006).

For at least the foregoing reasons, claims 13 and 28, and claims 14-23 which depend from claim 13, are patentable over Ross and Pories. Applicant therefore respectfully requests that the Examiner allow these claims.

Independent claims 24 and 29

Independent claims 24 and 29 recite features that distinguish from the applied references. For example, claim 24 recites:

*extracting* terms used in existing medical records of patients regarding cardinal symptoms of the patients;

*separating* the extracted terms into main concepts, concept qualifiers, and concept modifiers, wherein the main concepts are aligned on a spelling and concept basis;

*selecting* a plurality of terms as standard terms from the extracted terms that were separated as being the main concepts; and

*storing* the standard terms in a database, wherein the standard terms are stored in the database so as to be free from association with a particular medical record

...

*imparting* a concept identifier of a standard code to each of the standard terms; and

*classifying* each of the mapped standard terms according to whether a concept of the standard term exactly matches or substantially matches the imparted concept identifier of the standard code.

Emphasis added.

Claim 29 recites similar distinguishing features as claim 24, using respective language.

For example, building a database is described at page 12, line 37 to page 14, line 16 of the original filed instant specification. Also, for example, the separating the extracted terms into the claimed "main concepts, concept qualifiers, and concept modifiers", and the selecting a plurality of terms as standard terms is described at page 14, lines 2-16 of the present application. Further, for example, the mapping is described at page 14, line 17 to page 15, line 27 of the present application.

As discussed during the above-mentioned Interview, Ross and Pories each fail to disclose the claimed building a database of standard terms and mapping these terms to standard code. As discussed above, the Examiner states on page 4 of the Office Action, with respect to similar distinguishing features of previously pending claims 1-12, Ross does not disclose a database of standard terms which have been extracted from existing medical records of patients regarding cardinal symptoms of patients. Similarly, Ross does not disclose "extracting terms used in existing medical records of patients regarding cardinal symptoms of the patients," as recited in claims 24 and 29. Likewise, Ross does not disclose separating the extracted terms into the claimed "main concepts, concept qualifiers, and concept modifiers." Furthermore, there is no discussion in Ross of the claimed mapping the terms to standard codes, in which a concept identifier of a standard code is associated with each of the standard terms, and each of the mapped standard terms are classified according to whether a concept of the standard term exactly matches or substantially matches the associated concept identifier of the standard code.

As noted above, the Examiner alleges, on page 4 of the Office Action with respect to previously pending claims 1-12, that Pories discloses a database of standard terms which have been extracted from existing medical records of patients regarding

cardinal symptoms of patients. However, Pories does not disclose that the extracted terms are terms "regarding cardinal symptoms of patients," As recited in claims 24 and 29. In contrast, in Pories, the extracted terms are not the "*chief complaints*" as received from the patient. In Pories, the doctor receives the chief complaint from the patient, and *based on the chief complaint*, the doctor selects a "present illness" from a menu of available illnesses.

Moreover, Pories does not disclose the claimed separating the extracted terms into the claimed "main concepts, concept qualifiers, and concept modifiers." Pories describes a "Lexicon Filter" that is configured to extract relevant words and phrases from medical texts and other sources. *See* paragraph [0075] of Pories. The words and phrases filtered from the data source are repeated words such as "and", "the", and "of." *See* paragraph [0078] of Pories.

Furthermore, there is no discussion in Pories of the mapping the terms to standard codes.

As noted above, establishment of a *prima facie* case of obviousness requires that the Examiner factually show that the references in combination disclose *all* of the elements of the claims in their proper function, as well as provide a reasoned articulation that the combination of elements would have been known to produce a predictable result. As discussed above, neither Ross nor Pories discloses the distinguishing features of claims 24 and 29.

Accordingly, claims 24 and 29, and claims 25-27 which depend from claim 24, are patentable over Ross and Pories. Applicant therefore respectfully requests that the Examiner allow these claims.

### *Conclusion*

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,  
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

  
Anbar F. Khal  
Attorney for Applicant  
Registration No. 59,088

Date: 8/7/09  
1100 New York Avenue, N.W.  
Washington, D.C. 20005-3934  
(202) 371-2600  
971648\_1.DOC